

COLORADO

FRUIT TREE/VINEYARD SURVEY 2002

Issued Cooperatively By:





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Prepared and Published by

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Funding Provided By:

Colorado Apple Administrative Committee Colorado Wine Development Board Talbott Farms, Inc. Colorado Department of Agriculture U. S. Department of Agriculture

COLOR	RADO FRUIT	TREE/VINI	EYARD SURV	EY 2002

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Survey Description

Survey Objectives:

The 2002 Colorado Fruit Tree Survey was conducted during the early part of 2002 with most of the data collection completed during April and May using a survey reference date of January 1, 2002. The primary objectives for the survey were as follows:

- 1. Establish the current number of commercial orchards and vineyards in the state and for major fruit producing counties.
- 2. Summarize the acreage and tree/vine numbers by age and variety in those orchards/vineyards.
- 3. Group the number of orchards/vineyards with corresponding tree/vine numbers into various size categories.
- 4. Provide basic benchmark data on miscellaneous fruit crops not currently included in the Federal estimating program.

Survey History:

The first comprehensive survey of Colorado's Fruit Industry was conducted in 1967. A special survey in 1971 covered peaches only. Other comprehensive fruit tree surveys were conducted in 1979, 1985, 1989 and 1994. Grape data was collected in the 1989 survey as a miscellaneous item from growers who had grapes in addition to one or more of the other fruit crops. Beginning with the 1994 survey, extensive efforts were made to compile a complete list of vineyard operators as was done for the other major fruit crops. Data collection was concentrated on grapes and the four fruit crops (apples, peaches, pears and tart cherries) for which annual production estimates are made by the Colorado Agricultural Statistics Service. Data for the other miscellaneous fruits (apricots, nectarines, plums/prunes and sweet cherries) was reported by those operations who had one or more of the major fruit crops or grapes. No special efforts were made prior to the survey to build producer lists specifically for the miscellaneous fruit crops.

Survey Design and Data Collection:

The 2002 survey was designed to collect data from all known commercial orchards using list survey technology with complete follow-up of those who did not respond to the mailed questionnaire. Procedures used for the 2002 survey were virtually the same as those used for the 1994 survey to maintain as much comparability between the two surveys as possible.

Extensive list building was done prior to and during the survey period with the aid of industry contacts, County Cooperative Extension personnel and others for two primary purposes; 1) to prepare as complete a list as possible of all known producers and, 2) to avoid duplicate reporting for the same orchard/vineyard by more than one respondent. An initial mailing of 546 survey questionnaires was sent on February 21 to all known fruit and grape producers, primarily those already listed on the Colorado Agricultural Statistics Service (CASS) List Sampling Frame. An additional mailing of 214 questionnaires were mailed on March 13. The second mailing resulted from additional names of potential fruit/grape producers supplied by others that did not appear on the CASS List Sampling Frame. Several other questionnaires were mailed or distributed in person by field enumerators during the follow-up process. Extensive follow-up by telephone and/or personal interview was conducted during April and May. While the survey had general industry support, obtaining complete information from some producers continued to be difficult. The overall cooperation from respondents for the 2002 survey was somewhat better than the previous survey, resulting in more complete coverage of known producers. There were 461 questionnaires summarized. The survey results reflect the totals reported by the 461 respondents with some small additional allowance made for refusals, inaccesibles and unknown producers.

Information was collected and tabulated for orchards and vineyards of all sizes and types. The face page of the questionnaire was designed to identify possible duplication between tenants, landlords and partners involved with more than one operation, and use of operation names. Detailed information was requested for each different type of fruit/grape and each different variety of fruit/grape. Orchardists were instructed to exclude non-harvested pollenizers in the tree count. Apple producers were not asked to report the rootstock for each variety of apples since the reporting of such information was so poor on the 1994 survey the data was not summarized.

Data for the miscellaneous fruits should be considered as a minimum for the state. Survey efforts were directed primarily towards coverage for the four major tree fruits and for grapes. No producer lists are maintained for the miscellaneous fruits so the data was obtained only from those producers who had one or more of the major crops. However, the miscellaneous fruits would not be expected to be produced outside the major fruit producing counties so the acreage and tree numbers would not be significantly more than the data published in this report.

Data Summary:

Questionnaires received from producers were edited manually for legibility and coding. Identifying codes were entered for the variety of each fruit/grape and county of operation. Extensive efforts were made to have each line of data complete for fruit variety, county, year planted or topworked, acres, and number of trees/vines. While most producers provided the detail requested, several questionnaires were incomplete and could not be used.

2002 Verses 1994 and 1989 Data:

The 2002 data in this publication reflects the 2002 survey data only, with some comparable tables from the 1994 survey included for reference. No attempt was made to make the 2002 survey results consistent with the 1994 survey results in terms of the age of the trees/vines and the variety of the fruits/grapes. Due to the variability in reporting of data, particularly for age and variety, county and state totals do not always line up with the results from the 1994 survey. Much of this may be the result of changes in operations and/or ownership occurring during the past eight years where detailed age and variety information did not always get transferred from owner to owner. Except for the fact that cooperation appeared to be somewhat better for the 2002 survey than the 1994 survey, there is nothing to indicate that reporting for the 2002 survey was any more or any less accurate than the reporting for the 1994 survey. The major difference between the 2002 and earlier surveys is that producers were not asked to report blocking patterns, nor were they requested to report rootstock for apple varieties. The major effort was to keep the questionnaire simple enough that producers could and would report accurately the basic information on number of trees/vines, acres in orchards/vineyards and the variety of each fruit/grape crop produced. The 2002 survey did identify the percentage of total acres in conventional, transitional and organic orchards/vineyards.



APPLES

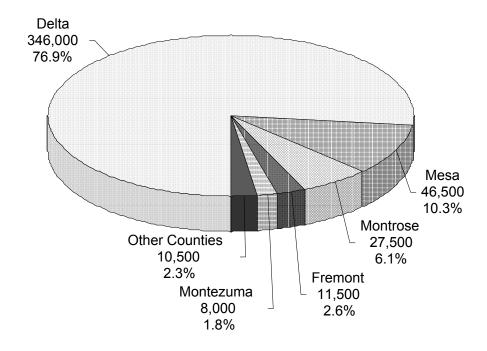
The number of apple trees in Colorado continues to decline as the removal of older orchards is occurring at a more rapid pace than the planting of new orchards. The 450,000 apple trees in orchards as of January 1, 2002 represented a decline of 30 percent from the 640,000 trees in Colorado orchards as of January 1, 1994. The peak number of apple trees in the state was recorded in the 1985 survey at just under 720,000. The area devoted to apples totaled 1,850 acres as of January 1, 2002, down 53 percent from the 3,900 acres devoted to apples in the 1994 survey. There were 210 orchards with apples in the latest survey compared with 330 orchards in the 1994 survey. Just under 76 percent of the apple trees are in conventional orchards, 21 percent are in organic orchards and 3 percent are in transitional orchards.

Delta County continues to be the major apple producing area of the state. The 346,000 trees in that area represent nearly 77 percent of the total trees while the 76 orchards in Delta County represent only 36 percent of the total number of apple orchards in the state. Mesa County's 46,500 apple trees, representing just over 10 percent of the total, ranked a distant second.

Gala has replaced Red Delicious as the most popular apple variety in the state. The 80,000 trees producing Gala apples represent nearly 18 percent of the total number of apple trees. Golden Delicious was a close second with 70,000 trees representing nearly 16 percent of the total. The Fuji variety ranked third and was produced on 66,500 trees, representing just under 15 percent of the total. Red Delicious ranked fourth, accounting for 63,000 trees and 14 percent of the total, and was followed by Jonathan with 50,500 trees representing 11 percent of the total. These five varieties accounted for 73 percent of all apple trees in the state.

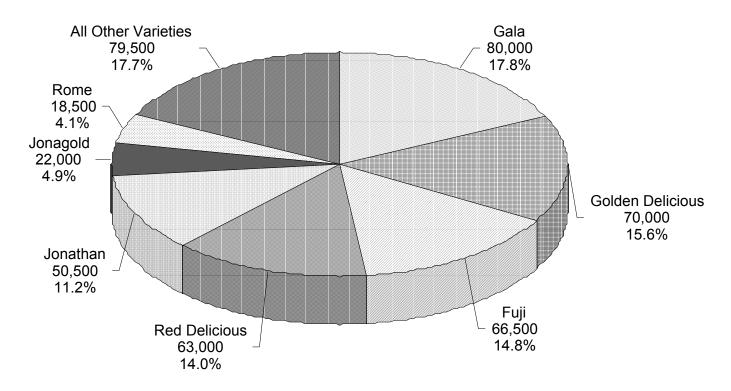
Colorado Fruit Tree/Vineyard Survey Apple Trees and Percent of Total by County, Colorado, January 1, 2002

Total: 450,000

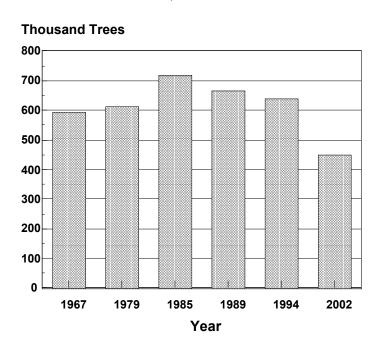


Apple Trees by Variety, Colorado, January 1, 2002

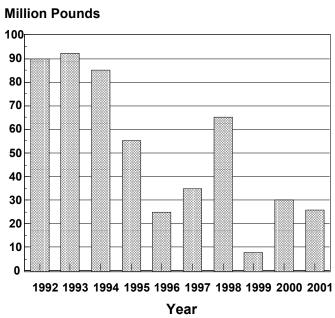
Total: 450,000



Apple Trees from Previous Surveys Colorado, 1967 - 2002



Colorado Apple Production 1992 - 2001



Apple Trees by Age and Variety, Colorado, 2002

			Trees by year	r set and age		,		
Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Trees of all Ages
Gala	200	3,700	27,600	38,800	9,500	200		80,000
Golden Delicious		600	5,500	18,100	15,900	29,600	300	70,000
Fuji	900	3,500	6,300	51,200	4,600			66,500
Red Delicious		1,400	200	5,600	20,600	34,400	800	63,000
Jonathan	300	1,000	1,300	14,500	16,200	16,600	600	50,500
Jonagold	1,100	1,100	7,100	6,200	6,500			22,000
Rome				900	9,500	8,100		18,500
Honey Crisp	2,500	10,700	1,400	1,400				16,000
Cameo	800	900	4,600	7,700				14,000
Granny Smith			800	400	3,400	1,100		5,700
Other/Unknown	1,500	1,500	6,300	10,500	12,200	6,200	5,600	43,800
TOTAL	7,300	24,400	61,100	155,300	98,400	96,200	7,300	450,000

Apple Trees by Age and Variety, Delta County, Colorado, 2002

	Tippic III	es by rige	una , unc	ij, Deita C	ouncy, con	oi aao, 2 00	_	
			Trees by year	ar set and age				
Variety	2001	1999-2000 2 - 3	1996-1998 4 - 6	1991-1995 7 - 11	1981-1990 12 - 21	Before 1981 22 +	Unknown	Total Trees of all
	Year	Years	Years	Years	Years	Years	Ages	Ages
Gala	200	3,300	21,600	26,600	8,700	200		60,600
Golden Delicious			4,400	14,400	12,700	27,500		59,000
Red Delicious	•••			3,800	17,800	27,100		48,700
Fuji	900	3,300	6,100	29,300	3,100			42,700
Jonathan			700	11,500	12,700	14,000		38,900
Jonagold	1,100	1,100	6,900	6,000	6,500			21,600
Rome				600	5,900	7,400		13,900
Honey Crisp	2,500	9,900	1,400	300				14,100
Cameo	800	900	4,600	7,700				14,000
Granny Smith			300	200	3,200	600		4,300
Other/Unknown	1,000	400	4,900	9,000	9,400	3,200	300	28,200
TOTAL	6,500	18,900	50,900	109,400	80,000	80,000	300	346,000

Apple Trees by Age and Variety, Fremont County, Colorado, 2002

	11	, o	• •		• /			
Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Trees of all Ages
Red Delicious		100	100	1,200	900	100	100	2,500
Gala			700	1,100	300			2,100
Golden Delicious		100	100	1,300	500	100		2,100
Jonathan	100		100	100	1,100	600		2,000
Honey Crisp				1,100				1,100
Other/Unknown		100	200	100	800	200	300	1,700
TOTAL	100	300	1,200	4,900	3,600	1,000	400	11,500

Apple Trees by Age and Variety, Mesa County, Colorado, 2002

			Trees by year	r set and age				
Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Trees of all Ages
Fuji				14,700	400		•••	15,100
Gala		300	500	9,200				10,000
Jonathan		1,000	100	1,900	1,900	300	500	5,700
Golden Delicious			1,000	400	600	1,600	300	3,900
Red Delicious		1,000	100	100	300	1,900	300	3,700
Granny Smith			500	200	200	500		1,400
Rome					1,100	100		1,200
Other/Unknown		700	200	300	2,300	1,400	600	5,500
TOTAL		3,000	2,400	26,800	6,800	5,800	1,700	46,500

Apple Trees by Age and Variety, Montezuma County, Colorado, 2002

Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Trees of all Ages
Red Delicious		•••		200	400	3,500		4,100
Jonathan				100	100	1,000		1,200
Rome					200	300		500
Golden Delicious				400				400
Other/Unknown	100	100	300	400		900		1,800
TOTAL	100	100	300	1,100	700	5,700		8,000

Apple Trees by Age and Variety, Montrose County, Colorado, 2002

		, <u>, , , , , , , , , , , , , , , , , , </u>	Trees by year	r set and age		,		
Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Trees of all Ages
Fuji		200	•••	7,200	1,100			8,500
Gala			4,600	400	500			5,500
Golden Delicious		500		1,500	2,000	400		4,400
Red Delicious	•••	300		300	900	1,300		2,800
Rome	•••			300	2,000			2,300
Jonathan	200			900	300	600		2,000
Honey Crisp		700						700
Other/Unknown				300	100	900		1,300
TOTAL	200	1,700	4,600	10,900	6,900	3,200		27,500

Apple Trees by Variety and County, Colorado 2002

		Number of Trees									
Variety	Delta County	Fremont County	Mesa County	Montezuma County	Montrose County	Other Counties	Total State				
Gala	60,600	2,100	10,000		5,500	1,800	80,000				
Golden Delicious	59,000	2,100	3,900	400	4,400	200	70,000				
Fuji	42,700		15,100		8,500	200	66,500				
Red Delicious	48,700	2,500	3,700	4,100	2,800	1,200	63,000				
Jonathan	38,900	2,000	5,700	1,200	2,000	700	50,500				
Jonagold	21,600					400	22,000				
Rome	13,900		1,200	500	2,300	600	18,500				
Honey Crisp	14,100	1,100			700	100	16,000				
Cameo	14,000						14,000				
Granny Smith	4,300		1,400				5,700				
Other/Unknown	28,200	1,700	5,500	1,800	1,300	5,300	43,800				
TOTAL	346,000	11,500	46,500	8,000	27,500	10,500	450,000				

Apple Trees by Variety and County, Colorado 1994

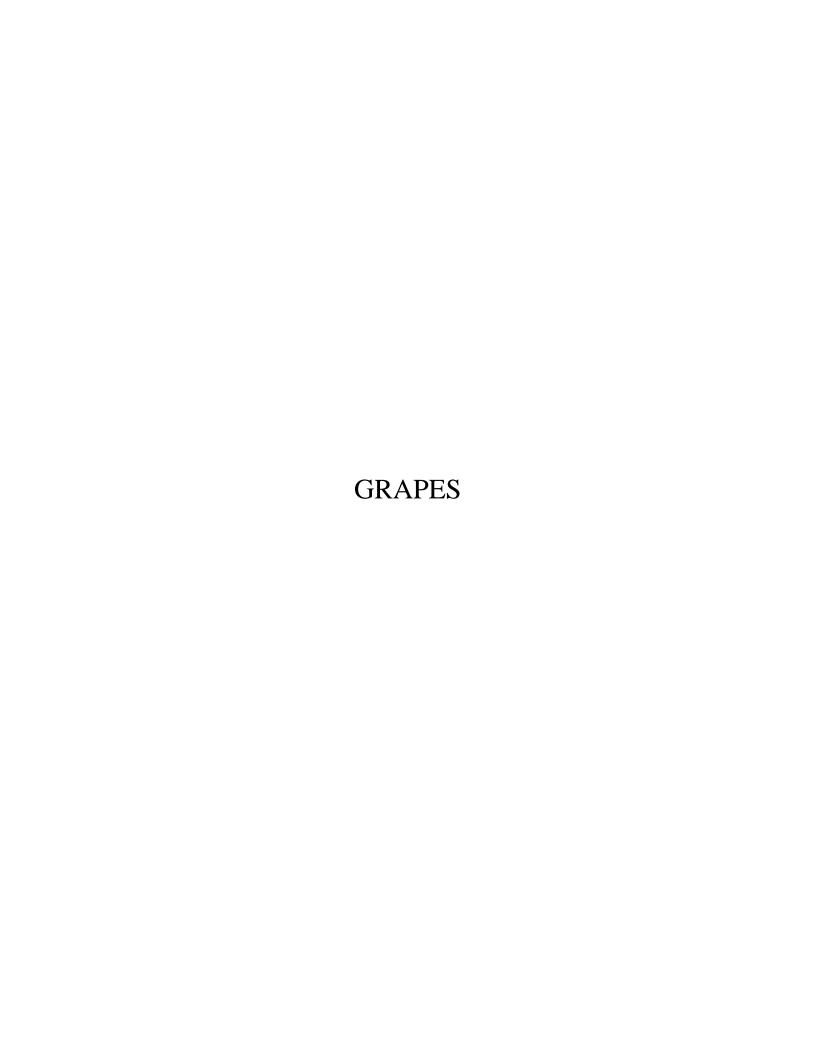
	Number of Trees										
Variety	Delta County	Fremont County	Mesa County	Montezuma County	Montrose County	Other Counties	Total State				
Red Delicious	126,000	11,000	31,000	4,700	10,500	1,800	185,000				
Golden Delicious	108,000	6,500	9,200	800	8,500	1,000	134,000				
Jonathan	66,000	5,500	13,800	500	1,600	1,100	88,500				
Rome	65,500	500	2,800	700	5,500		75,000				
Gala	30,700		6,600		400	1,600	39,300				
Fuji	13,100		1,000		3,000	100	17,200				
Akane	9,800		4,100				13,900				
Braeburn	11,700		500			100	12,300				
Other/Unknown	49,200	4,500	11,000	2,300	5,500	2,300	74,800				
TOTAL	480,000	28,000	80,000	9,000	35,000	8,000	640,000				

Apple Trees by Variety and County, Colorado 1989

-											
	Number of Trees										
Variety	Delta County	Fremont County	Mesa County	Montezuma County	Montrose County	Other Counties	Total State				
Red Delicious	145,000	11,000	57,000	10,000	15,000	2,000	240,000				
Golden Delicious	102,000	9,000	11,000	3,500	5,500	2,000	133,000				
Rome	77,000	4,000	5,000	3,500	10,500	1,000	101,000				
Jonathan	66,000	8,500	8,000	3,500	3,000	1,000	90,000				
Granny Smith	3,800	4,500	600			100	9,000				
Other/Unknown	56,200	13,000	13,400	4,500	1,000	3,900	92,000				
TOTAL	450,000	50,000	95,000	25,000	35,000	10,000	665,000				

Apple Trees per Acre by Year Set and Acres, Colorado, 2002

						,				
	1999 - 2001		1981	- 1998	Before 1981		Unknown Age		Total	
Trees Per Acre	Trees	Acres	Trees	Acres	Trees	Acres	Trees	Acres	Trees	Acres
1 - 124	300	4	7,700	102	40,800	568	1,200	26	50,000	700
125 - 249	10,200	48	74,100	386	42,700	234	3,000	17	130,000	685
250 - 499	2,500	6	71,700	204	12,700	43	3,100	12	90,000	265
500 +	18,700	22	161,300	178					180,000	200
Total	31,700	80	314,800	870	96,200	845	7,300	55	450,000	1,850



GRAPES

Grapes continue to be the most highly recognized growth industry in Colorado agriculture even though only a relatively few number of acres are involved. While there had been a number of small vineyards in the state for many years, grapes were not included in a Fruit Tree/Vineyard Survey until 1994 when 305,000 vines on 320 acres were counted. The 2002 survey counted 540,000 vines on 650 acres, representing an increase of 77 percent in the number of vines and a more than doubling of the acreage devoted to grapes. Virtually all of the grapes produced in Colorado are wine grapes. The acreage and number of vines of table grapes was not significant enough to publish separately. Nearly 89 percent of all grapes are grown in conventional vineyards with the remaining 11 percent in transitional and organic vineyards.

Mesa County, with 350,000 vines on 415 acres, accounted for 65 percent of the grape vines and 64 percent of the grape acreage in the state as of January 1, 2002. Delta County was a distant second with 97,000 vines on 115 acres. Montezuma County had 48,500 vines on 45 acres; Montrose County had 16,500 vines on 25 acres; and Fremont County had 13,000 vines on 30 acres. These five counties represented 97 percent of the state's total number of grape vines and 97 percent of the number of acres.

Merlot tops the rather lengthy list of wine varieties produced in the state. That variety accounted for 110,000 vines or 20 percent of the state total. Chardonnay was the second most popular variety with 99,000 vines representing 18 percent of the total. Cabernet Sauvignon ranked third with 72,000 vines; Cabernet Franc was fourth with 35,500 vines; Syrah ranked fifth with 33,000 vines; and Riesling was a close sixth with 32,500 vines. These six varieties accounted for 71 percent of the state's total number of grape vines.

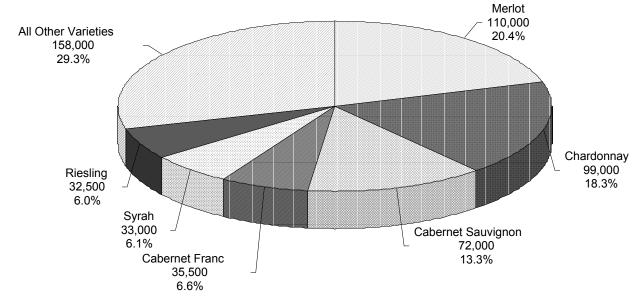
Colorado Fruit Tree/Vineyard Survey Grape Vines and Percent of Total by County, Colorado, January 1, 2002

Total: 540,000

Mesa 351,000 65.0% Delta 97.000 18.0% Other Counties Montezuma 14,000 48,500 2.6% 9.0% Fremont Montrose 13,000 16,500 2.4% 3.1%

Grape Vines by Variety, Colorado, January 1, 2002

Total: 540,000



Grape Vines by Age and Variety, Colorado, 2002

		_	Vinas by	m act and car		-		
		1	vines by yea	r set and age	1			
Variety	2001	1999-2000 2 - 3	1996-1998 4 - 6	1991-1995 7 - 11	1981-1990 12 - 21	Before 1981 22 +	Unknown	Total Vines of all
	Year	Years	Years	Years	Years	Years	Ages	Ages
Merlot	3,900	35,400	17,600	30,400	17,200	1,300	4,200	110,000
Chardonnay	6,200	16,400	15,400	21,600	38,200	700	500	99,000
Cabernet Sauvignon	6,900	32,600	12,600	12,000	6,400	1,500		72,000
Cabernet Franc	4,900	10,300	4,800	6,800	6,400		2,300	35,500
Syrah	5,700	25,000			2,300			33,000
Riesling	4,400	1,700	10,800	7,600	6,500	1,300	200	32,500
Pinot noir	200	7,100	4,500	2,800	5,900	900	100	21,500
Sauvignon blanc		7,600	1,300	2,200	6,400		•••	17,500
Shiraz	500	10,600	2,600	2,800				16,500
Gewurztraminer		100	4,200	1,800	9,200	200	•••	15,500
Viognier	4,200	3,100	900	900	1,900			11,000
Pinot gris		6,200	800	400			100	7,500
Sangiovese	1,800		3,300	2,400			•••	7,500
Lemberger		900		2,000	4,100			7,000
Semillion		2,200			4,300		•••	6,500
Chancellor	700	600	200	2,200			•••	3,700
Muscat blanc		1,800		100	600			2,500
Pinot blanc	•••	2,500						2,500
Pinot Verdot	1,700						•••	1,700
Other/Unknown	3,400	10,800	7,900	3,700	4,600	1,000	5,700	37,100
TOTAL	44,500	174,900	86,900	99,700	114,000	6,900	13,100	540,000

Grape Vines by Age and Variety, Delta County, Colorado, 2002

				• /	• /			
			Vines by yea	ar set and age				
Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Vines of all Ages
Chardonnay	1,000	3,900	6,200	6,700	20,800		300	38,900
Riesling	3,000	600	7,500	4,500			200	15,800
Pinot noir	200	4,400	2,900	2,600	2,800		100	13,000
Gewurztraminer		100	1,800		5,600	200		7,700
Merlot	1,000	2,900	2,500	1,100			100	7,600
Pinot gris		3,500	800				100	4,400
Cabernet Franc		1,000	1,600	1,200			100	3,900
Muscat blanc		400						400
Other/Unknown	500	2,000	2,800					5,300
TOTAL	5,700	18,800	26,100	16,100	29,200	200	900	97,000

Grape Vines by Age and Variety, Fremont County, Colorado, 2002

	•		Vines by year	r set and age	v /			
Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Vines of all Ages
Chardonnay	3,600	400	2,200				200	6,400
Cabernet Franc			1,000					1,000
Pinot noir			700					700
Riesling		100	400		100			600
Chancellor	500							500
Pinot gris		100						100
Sauvignon blanc		100						100
Other/Unknown	100	200	100		400	100	2,700	3,600
TOTAL	4,200	900	4,400	•••	500	100	2,900	13,000

Grape Vines by Age and Variety, Larimer County, Colorado, 2002

Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Vines of all Ages
Cabernet Franc			500		•••			500
Cabernet Sauvignon			500					500
Chardonnay			500					500
Merlot			500					500
Chancellor	200			200				400
Other/Unknown		100					500	600
TOTAL	200	100	2,000	200			500	3,000

Grape Vines by Age and Variety, Mesa County, Colorado, 2002

	•	ies sy rige	,					
Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Vines of all Ages
Merlot	300	25,700	13,100	28,400	17,000	1,300	4,100	89,900
Cabernet Sauvignon	4,800	24,000	9,400	12,000	6,400	1,500		58,100
Chardonnay		9,300	6,500	12,400	17,400	700	•••	46,300
Syrah	5,100	18,800			2,000			25,900
Cabernet Franc	3,300	2,000	1,700	5,600	6,400		2,100	21,100
Shiraz	500	10,600	2,600	2,800				16,500
Sauvignon blanc		6,400	1,300	2,200	6,400		•••	16,300
Riesling		1,000	2,900	2,500	6,400	1,300	•••	14,100
Viognier	2,800	3,100	900	900	1,900		•••	9,600
Sangiovese	1,800		3,300	2,400				7,500
Gewurztraminer			2,400	900	3,600		•••	6,900
Semillion		2,200			4,300		•••	6,500
Lemberger				1,100	4,100		•••	5,200
Pinot noir					3,100	900	•••	4,000
Pinot gris		2,600		400				3,000
Pinot blanc		2,500					•••	2,500
Muscat blanc		1,400			500		•••	1,900
Other/Unknown	1,300	8,000	300	700	2,700	500	2,200	15,700
TOTAL	19,900	117,600	44,400	72,300	82,200	6,200	8,400	351,000

Grape Vines by Age and Variety, Montezuma County, Colorado, 2002

	Vines by year set and age										
Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Vines of all Ages			
Merlot	2,600	5,900	•••	•••				8,500			
Cabernet Franc	1,600	6,400						8,000			
Cabernet Sauvignon	2,100	5,500						7,600			
Syrah	600	6,200						6,800			
Chardonnay	1,600	2,800						4,400			
Petite Verdot	1,700							1,700			
Riesling	1,400							1,400			
Viognier	1,400							1,400			
Sauvignon blanc		1,100						1,100			
Other/Unknown	1,300		3,700	2,600				7,600			
TOTAL	14,300	27,900	3,700	2,600		•••		48,500			

Grape Vines by Age and Variety, Montrose County, Colorado, 2002

		V						
Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Vines of all Ages
Pinot noir	•••	2,700	900	200	•••			3,800
Cabernet Sauvignon		3,100						3,100
Merlot		900	900	900				2,700
Chardonnay				2,500				2,500
Lemberger		900		900				1,800
Cabernet Franc	•••	900		•••	•••	•••	100	1,000
Gewurztraminer				900				900
Riesling				600				600
Muscat blanc	•••			100	•••	•••		100
Other/Unknown								
TOTAL		8,500	1,800	6,100			100	16,500

Grape Vines by Variety and County, Colorado 2002

	Number of Vines									
Variety	Delta County	Fremont County	Larimer County	Mesa County	Montezuma County	Montrose County	Other Counties	Total State		
Merlot	7,600		500	89,900	8,500	2,700	800	110,000		
Chardonnay	38,900	6,400	500	46,300	4,400	2,500		99,000		
Cabernet Sauvignon .			500	58,100	7,600	3,100	2,700	72,000		
Cabernet Franc	3,900	1,000	500	21,100	8,000	1,000		35,500		
Syrah				25,900	6,800		300	33,000		
Riesling	15,800	600		14,100	1,400	600		32,500		
Pinot noir	13,000	700		4,000		3,800		21,500		
Sauvignon blanc		100		16,300	1,100			17,500		
Shiraz				16,500				16,500		
Gewurztraminer	7,700			6,900		900		15,500		
Viognier				9,600	1,400			11,000		
Pinot gris	4,400	100		3,000				7,500		
Sangiovese				7,500				7,500		
Lemberger				5,200		1,800		7,000		
Semillion				6,500				6,500		
Chancellor		500	400				2,800	3,700		
Muscat blanc	400			1,900		100	100	2,500		
Pinot blanc				2,500				2,500		
Pinot Verdot					1,700			1,700		
Other/Unknown	5,300	3,600	600	15,700	7,600		4,300	37,100		
TOTAL	97,000	13,000	3,000	351,000	48,500	16,500	11,000	540,000		

Grape Vines by Variety and County, Colorado 1994

	Number of Vines									
Variety	Delta County	Fremont County	Mesa County	Other Counties	Total State					
Merlot		4,300	63,500		67,800					
Chardonnay	37,500		27,500		65,000					
Cabernet Sauvignon			24,200		24,200					
Riesling	12,500	2,200	11,700		26,400					
Cabernet Franc			19,900		19,900					
Seyval Blanc			15,300		15,300					
Sauvignon Blanc			13,300		13,300					
Other/Unknown	17,000	1,500	49,200	5,400	73,100					
TOTAL	67,000	8,000	224,600	5,400	305,000					

Grape Vines per Acre by Year Set and Acres, Colorado, 2002

	Grupe vines ber riche by rear set and riches, colorado, 2002											
	1999	1999 - 2001		- 1998	Before	Before 1981 Unknown Age		То	Total			
Vines Per Acre	Vines	Acres	Vines	Acres	Vines	Acres	Vines	Acres	Vines	Acres		
1 - 249	1,000	16	3,000	13	500	8			4,500	37		
250 - 499	7,000	19	6,000	17	500	2			13,500	38		
500 - 999	105,100	137	185,000	240	5,900	8	4,000	5	300,000	390		
1,000+	106,300	91	106,600	85			9,100	9	222,000	185		
Total	219,400	263	300,600	355	6,900	18	13,100	14	540,000	650		



PEACHES

Peaches have become Colorado's most important fruit crop in terms of value of production with 520,000 trees in orchards as of January 1, 2002. The latest count represents an increase of 11 percent from the January 1, 1994 inventory of 400,000 trees. This is the largest number of peach trees in the state since the 1967 inventory of 612,000 peach trees. The 1979 survey indicated an inventory of just 325,000 trees. New plantings increased the number of trees to 378,000 in 1985 and aggressive planting over the next few years increased tree numbers to 470,000 by 1989. The number of trees then declined to 400,000 by 1994. Another upswing in planting occurred leading to the current tree level. New plantings have been very active with 16 percent of the total being planted since 1998. The total area devoted to peaches as of January 1, 2002 totaled 2,015 acres, down 3 percent from the 2,080 acres of peach trees in 1994. Recent plantings have been focused towards increased number of trees per acre. Nearly 90 percent of the peach trees are in conventional orchards, with 8 percent in organic orchards and 2 percent in transitional orchards.

Mesa County, with 387,000 trees, is the major producing area and accounts for nearly 74 percent of the state's total peach trees. Delta county remains a distant second with 107,000 trees representing 21 percent of the total. Montrose and Montezuma Counties account for most of the remaining 26,000 peach trees.

Numerous varieties of peaches are produced in the state. Cresthaven is the dominant variety, totaling 62,000 trees and nearly 12 percent of the total peach trees. Red Globe is a close second with 60,900 trees representing just under 12 percent of the total peach trees. Suncrest, which was the leading peach variety in the 1994 survey with 62,500 trees and 16 percent of the total declined to 56,400 trees representing just under 11 percent of the January 1, 2002 inventory of all peach trees. Redhaven, Glohaven, and Newhaven varieties each accounted for just under 7 percent of the total. These six varieties accounted for nearly 55 percent of the total peach trees in the state with each of the other varieties on the long list accounting for minor percentages. Many producers could not identify their peach varieties and the 107,200 trees of other and unknown varieties represented nearly 21 percent of the total.

Colorado Fruit Tree/Vineyard Survey Peach Trees and Percent of Total by County, Colorado, January 1, 2002 Total: 520,000

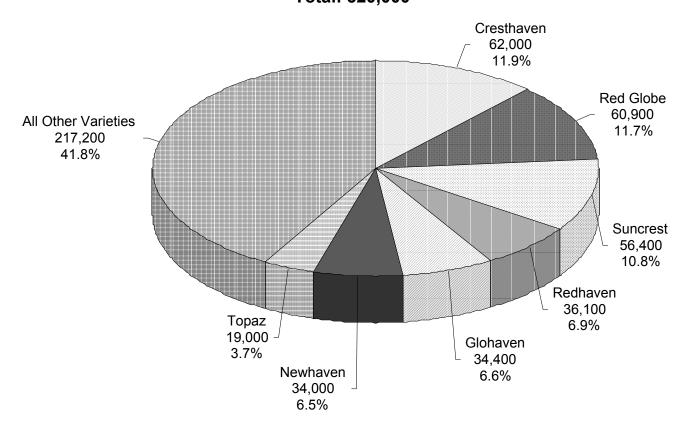
Mesa
387,000
74.4%

Other Counties
1,000
0.2%

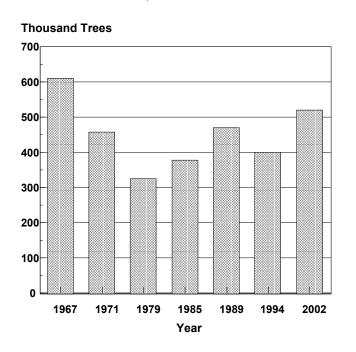
Delta
107,000
20.6%

Montrose
15,000
2.9%

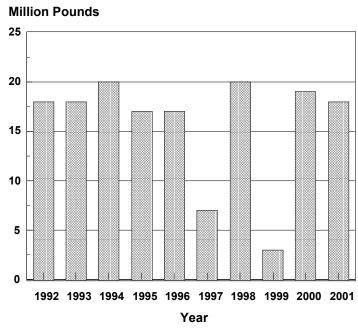
Peach Trees by Variety, Colorado, January 1, 2002 Total: 520,000



Peach Trees from Previous Surveys Colorado, 1967 - 2002



Colorado Peach Production 1992 - 2001



Peach Trees by Age and Variety, Colorado, 2002

	·			r set and age	u vuiit	<i>y</i> ,		
Variety	2001 1	1999-2000 2 - 3	1996-1998 4 - 6	1991-1995 7 - 11	1981-1990 12 - 21	Before 1981 22 +	Unknown	Total Trees of all
	Year	Years	Years	Years	Years	Years	Ages	Ages
Cresthaven	3,400	6,600	16,700	8,500	25,200		1,600	62,000
Red Globe	4,100	6,300	15,000	7,900	23,100	2,100	2,400	60,900
Suncrest	3,200	2,900	6,000	6,900	32,300	4,500	600	56,400
Redhaven	400	5,000	10,100	7,600	11,700	1,200	100	36,100
Glohaven	1,500	1,700	3,800	7,200	17,300	1,500	1,400	34,400
Newhaven	1,600	10,000	9,800	8,900	3,700		•••	34,000
Topaz	3,300	100	4,000	4,500	7,100		•••	19,000
Rosa	200	800	4,900	3,400	4,100	1,400	300	15,100
J. H. Hale	1,500	1,500	3,100	2,500	5,000			13,600
Angelus	900	2,200	5,800	3,400	600		300	13,200
Blake	300	100	100	1,500	8,600	1,100	900	12,600
Elberta			1,700	800	3,600	4,500	400	11,000
Regina	200	1,600	2,400	2,200	1,000	1,800	400	9,600
Flavorcrest	100	400		6,600	1,700			8,800
Elegant Lady		600	2,400	2,200	2,700			7,900
Flamecrest		200	800	1,800	3,500		1,500	7,800
Bellaire	300	4,200	1,500	700	500		200	7,400
Summer Lady	1,400	1,500			•••	100		3,000
Berenda Sun		•••		1,600	•••			1,600
Loring				1,300				1,300
Other/Unknown	7,200	10,700	24,100	20,600	29,400	7,300	5,000	104,300
TOTAL	29,600	56,400	112,200	100,100	181,100	25,500	15,100	520,000

Peach Trees by Age and Variety, Delta County, Colorado, 2002

			Trees by year	r set and age				
						Before		Total
Variety	2001	1999-2000	1996-1998	1991-1995	1981-1990	1981		Trees
	1	2 - 3	4 - 6	7 - 11	12 - 21	22 +	Unknown	of all
	Year	Years	Years	Years	Years	Years	Ages	Ages
Red Globe	3,500	3,000	10,300	2,000	2,600	1,000	2,000	24,400
Cresthaven	2,400	2,700	10,400	600	2,000		600	18,700
Newhaven	1,100	3,200	4,300	1,400				10,000
Suncrest	700	1,100	1,600	700	2,400	300		6,800
Redhaven		1,900	1,600	200	1,200			4,900
J. H. Hale	1,000	700	1,400	200	1,300			4,600
Glohaven		400	1,200	2,200	800			4,600
Flamecrest				1,400	900		1,500	3,800
Rosa		500	1,000	300	800	1,100		3,700
Angelus	100	1,200	1,200	900				3,400
Regina			900	1,600	•••		400	2,900
Topaz		100		1,800	100			2,000
Elegant Lady			1,200	500	100			1,800
Summer Lady		1,500			•••			1,500
Elberta				100	500	100		700
Bellaire					500			500
Blake					100	400		500
Other/Unknown	1,000	1,200	4,900	900	3,400	500	300	12,200
TOTAL	9,800	17,500	40,000	14,800	16,700	3,400	4,800	107,000

Peach Trees by Age and Variety, Mesa County, Colorado, 2002

				r set and age	ounty, con			
Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Trees of all Ages
Suncrest	2,000	1,800	4,400	4,700	28,700	3,900	600	46,100
Cresthaven	1,000	3,600	6,200	7,400	22,200		1,000	41,400
Red Globe	600	3,300	4,600	5,600	20,500	900	400	35,900
Redhaven	400	2,500	8,200	7,100	10,300	700	100	29,300
Glohaven	1,500	1,300	2,100	3,600	16,300	1,500	1,400	27,700
Newhaven	500	6,500	5,300	7,500	3,700			23,500
Topaz	3,300		4,000	2,700	7,000			17,000
Blake	300	100	100	1,500	8,500	700	900	12,100
Rosa	200	300	3,900	3,100	3,300	300	300	11,400
Elberta			1,300	700	3,000	4,400	400	9,800
Angelus	400	1,000	4,600	2,300	600		300	9,200
J. H. Hale	500	800	1,500	2,000	3,300			8,100
Bellaire	300	4,200	1,500	700			200	6,900
Flavorcrest	100	400		4,200	1,700			6,400
Regina	200	1,600	800	600	1,000	1,800		6,000
Elegant Lady		600	1,200	1,000	2,600			5,400
Flamecrest		200	800	400	2,600			4,000
Summer Lady	1,400					100		1,500
Other/Unknown	6,000	7,800	16,800	19,200	25,000	6,000	4,500	85,300
TOTAL	18,700	36,000	67,300	74,300	160,300	20,300	10,100	387,000

Peach Trees by Age and Variety, Montezuma County, Colorado, 2002

1 Cat	ch fices i	by Age and	variety, r	VIOII (CZUIII)	a County, C	Jului auu, 1	2002	
Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Trees of all Ages
Flavorcrest	•••		•••	2,400	•••		•••	2,400
Berenda Sun		•••		1,600				1,600
Glohaven				1,300				1,300
Loring				1,300				1,300
Suncrest				1,300				1,300
Redhaven					100			100
Other/Unknown		100	300		900	700		2,000
TOTAL		100	300	7,900	1,000	700		10,000

Peach Trees by Age and Variety, Montrose County, Colorado, 2002

			Trees by year	r set and age				
Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Trees of all Ages
Suncrest	500	•••	•••	200	1,200	300		2,200
Cresthaven	•••	300	100	500	1,000	•••		1,900
Redhaven		600	300	300	100	500		1,800
J. H. Hale			200	300	400			900
Glohaven			500	100	200			800
Elegant Lady				700				700
Regina			700					700
Angelus	400			200				600
Red Globe			100	300		200		600
Newhaven		300	200					500
Elberta					100			100
Other/Unknown		1,600	1,600	1,000				4,200
TOTAL	900	2,800	3,700	3,600	3,000	1,000	•••	15,000

Peach Trees by Variety and County, Colorado 2002

Variety	Delta County	Mesa County	Montezuma County	Montrose County	Other Counties	Total State
Cresthaven	18,700	41,400		1,900		62,000
Red Globe	24,400	35,900		600		60,900
Suncrest	6,800	46,100	1,300	2,200		56,400
Redhaven	4,900	29,300	100	1,800		36,100
Glohaven	4,600	27,700	1,300	800		34,400
Newhaven	10,000	23,500		500		34,000
Topaz	2,000	17,000				19,000
Rosa	3,700	11,400				15,100
J. H. Hale	4,600	8,100		900		13,600
Angelus	3,400	9,200		600		13,200
Blake	500	12,100				12,600
Elberta	700	9,800		100	400	11,000
Regina	2,900	6,000		700		9,600
Flavorcrest		6,400	2,400			8,800
Elegant Lady	1,800	5,400		700		7,900
Flamecrest	3,800	4,000				7,800
Bellaire	500	6,900				7,400
Summer Lady	1,500	1,500				3,000
Berenda Sun			1,600			1,600
Loring			1,300			1,300
Other/Unknown	12,200	85,300	2,000	4,200	600	104,300
TOTAL	107,000	387,000	10,000	15,000	1,000	520,000

Peach Trees by Variety and County, Colorado 1994

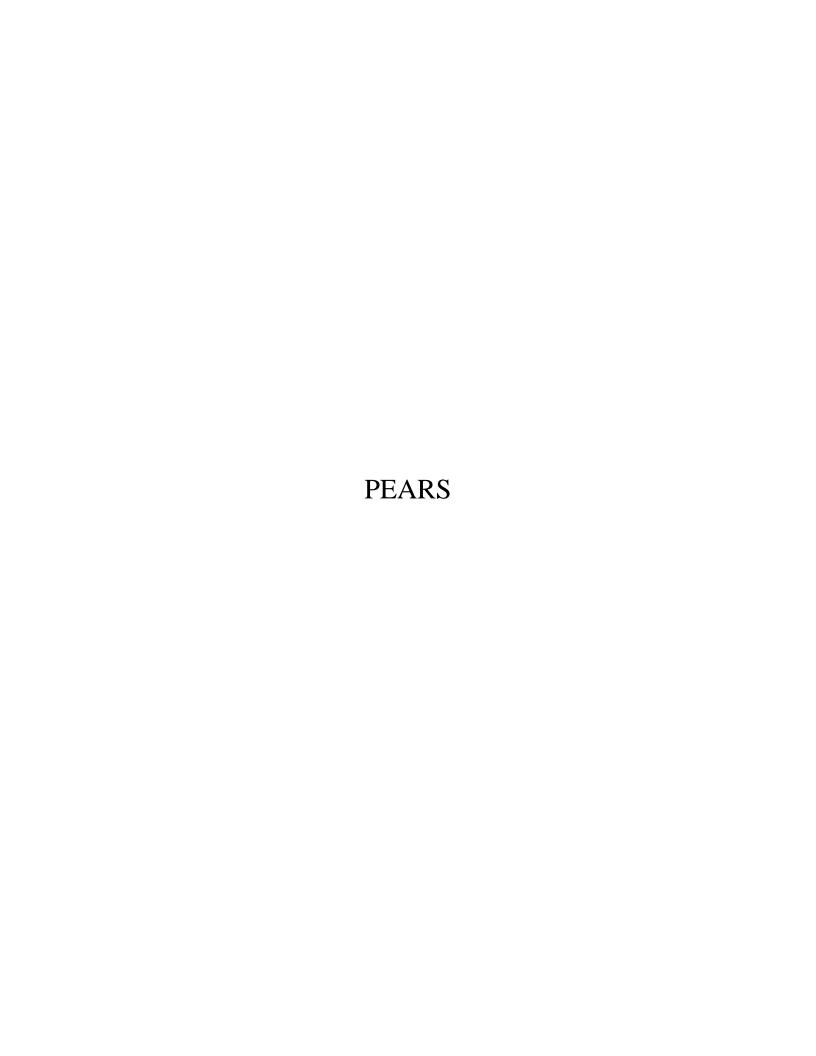
			Number of Trees		
Variety	Delta County	Mesa County	Montrose County	Other Counties	Total State
Suncrest	13,700	45,800	3,000		62,500
Red Globe	12,000	26,700	900	100	39,700
Cresthaven	5,900	28,800	3,500	300	38,500
Glohaven	3,200	31,500	300	100	35,100
Redhavenen	3,600	27,600	1,500		32,700
Standard Elberta	2,000	19,400	300	1,100	22,800
Blake	400	17,600			18,000
Flamecrest	6,300	8,000	1,600		15,900
J. H. Hale	5,000	6,100	2,000	100	13,200
Rosa	1,700	9,700	500		11,900
Topaz	1,700	9,800		100	11,600
Redskin	500	8,200		100	8,800
Newhaven		6,100		100	6,200
Bellaire	500	4,100		100	4,700
Loring	100	4,500			4,600
Other/Unknown	9,400	61,600	2,700	100	73,800
TOTAL	66,000	315,500	16,300	2,200	400,000

Peach Trees by Variety and County, Colorado 1989

			Number of Trees		
Variety	Delta County	Mesa County	Montrose County	Other Counties	Total State
Suncrest	24,000	55,900	2,500	1,600	84,000
Red Globe	17,000	29,200	1,800		48,000
Standard Elberta	3,500	38,800	700		43,000
Redhaven	4,000	27,000	1,000		32,000
Cresthaven	5,000	23,600	1,400		30,000
Glohaven	2,500	27,000	500		30,000
J H Hale	7,500	14,000	4,500		26,000
Blake	1,000	23,000			24,000
Flamecrest	2,000	9,000		1,000	12,000
Rosa	3,500	7,000		500	11,000
Gleason Elberta		9,400		600	10,000
Giant Elberta	500	6,400	700	400	8,000
July Elberta	500	7,000		500	8,000
Redskin	1,100	6,600	300		8,000
Loring	400	3,600			4,000
Western Pride	500	3,500			4,000
Other/Unknown	7,000	79,000	1,600	400	88,000
TOTAL	80,000	370,000	15,000	5,000	470,000

Peach Trees per Acre by Year Set and Acres, Colorado, 2002

	1999	1999 - 2001		1981 - 1998		Before 1981		wn Age	Total	
Trees Per Acre	Trees	Acres	Trees	Acres	Trees	Acres	Trees	Acres	Trees	Acres
1 - 124	2,000	22	9,500	117	2,500	34	2,000	21	16,000	194
125 - 249	16,000	83	119,000	625	14,000	88	11,000	67	160,000	863
250 +	68,000	175	264,900	753	9,000	23	2,100	7	344,000	958
Total	86,000	280	393,400	1,495	25,500	145	15,100	95	520,000	2,015



PEARS

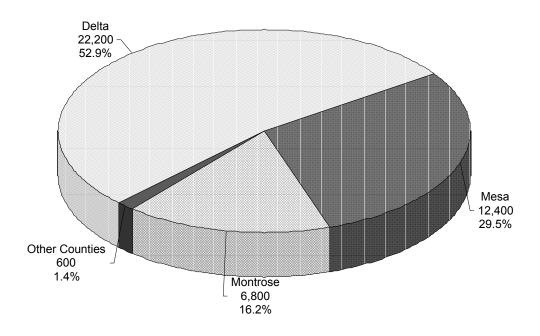
The number of pear trees and the acreage both declined from the 1994 survey. The 42,000 trees in orchards as of January 1, 2002 dropped 33 percent from the 63,000 trees inventoried in the 1994 survey. The acreage devoted to pears also declined, dropping 31 percent from 465 acres in 1994 to 320 acres counted in the 2002 survey. The latest survey indicated that 62 percent of the pears trees are in conventional orchards, 27 percent of the trees are in organic orchards and 11 percent are in transitional orchards.

Delta County continues to be the leading pear producing area of the state, accounting for 22,200 trees representing 53 percent of the state's total. Mesa County, with 12,400 trees representing 30 percent of the total, ranked second. Montrose County's 6,800 trees ranked a distant third, representing 16 percent of the total. There were just 600 pear trees counted in other counties.

Bartlett continues to be the major pear variety produced in the state. The 33,200 Bartlett pear trees accounted for 79 percent of the total number of trees. Red Bartlett pears ranked a distant second with 1,700 trees accounting for just 4 percent of the total. A number of producers were not able to identify their pear varieties so the 6,500 trees in the other and unknown group represented 15 percent of the total. Asian Varieties and Red Anjou made up the remaining 2 percent of the trees.

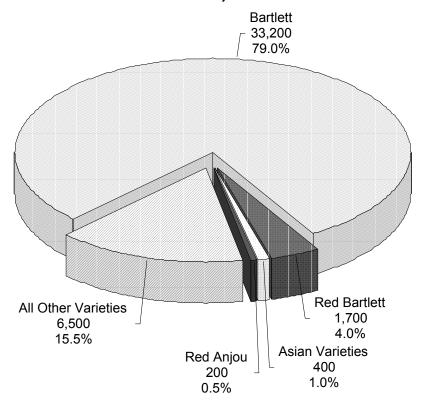
Colorado Fruit Tree/Vineyard Survey Pear Trees and Percent of Total by County, Colorado, January 1, 2002

Total: 42,000



Pear Trees by Variety, Colorado, January 1, 2002

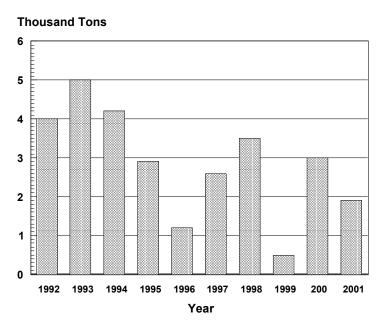
Total: 42,000



Pear Trees from Previous Surveys Colorado, 1967 - 2002

150 100 50 1967 1979 1985 1989 1994 2001 Year

Colorado Pear Production 1992 - 2001



Pear Trees by Age and Variety, Colorado, 2002

						• /		
			Trees by year	r set and age				
Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Trees of all Ages
Bartlett	100	700	1,800	3,300	3,700	22,100	1,500	33,200
Red Bartlett					1,000	700		1,700
Asian Varieties				200	200			400
Red Anjou			200					200
Other/Unknown		100	3,400	100	200	2,500	200	6,500
TOTAL	100	800	5,400	3,600	5,100	25,300	1,700	42,000

Pear Trees by Age and Variety, Delta County, Colorado, 2002

		y g						
Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Trees of all Ages
Bartlett		700	1,800	1,400	1,700	14,000	1,300	20,900
Red Bartlett					200	700		900
Asian Varieties					200			200
Red Anjou			200					200
Other/Unknown								
TOTAL		700	2,000	1,400	2,100	14,700	1,300	22,200

Pear Trees by Age and Variety, Mesa County, Colorado, 2002

			Trees by year	r set and age	•			
Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Trees of all Ages
Bartlett				1,300	1,200	7,700	200	10,400
Red Bartlett					800			800
Asian Varieties				200				200
Other/Unknown		100				700	200	1,000
TOTAL	•••	100		1,500	2,000	8,400	400	12,400

Pear Trees by Age and Variety, Montrose County, Colorado, 2002

		oj rige uni	-					
Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Trees of all Ages
Bartlett				500	700	300		1,500
Other/Unknown			3,400	•••	200	1,700		5,300
TOTAL	•••	•••	3,400	500	900	2,000		6,800

Pear Trees by Variety and County, Colorado 2002

	Number of Trees								
Variety	Delta County	Mesa County	Montrose County	Other Counties	Total State				
Bartlett	20,900	10,400	1,500	400	33,200				
Red Bartlett	900	800			1,700				
Asian Varieties	200	200			400				
Red Anjou	200				200				
Other/Unknown		1,000	5,300	200	6,500				
TOTAL	22,200	12,400	6,800	600	42,000				

Pear Trees by Variety and County, Colorado 1994

	Number of Trees								
Variety	Delta County	Mesa County	Montrose County	Other Counties	Total State				
Bartlett	27,100	18,100	6,200	600	52,000				
D' Anjou	900	500			1,400				
Asian Varieties	500	900			1,400				
Other/Unknown	4,500	2,700	800	200	8,200				
TOTAL	33,000	22,200	7,000	800	63,000				

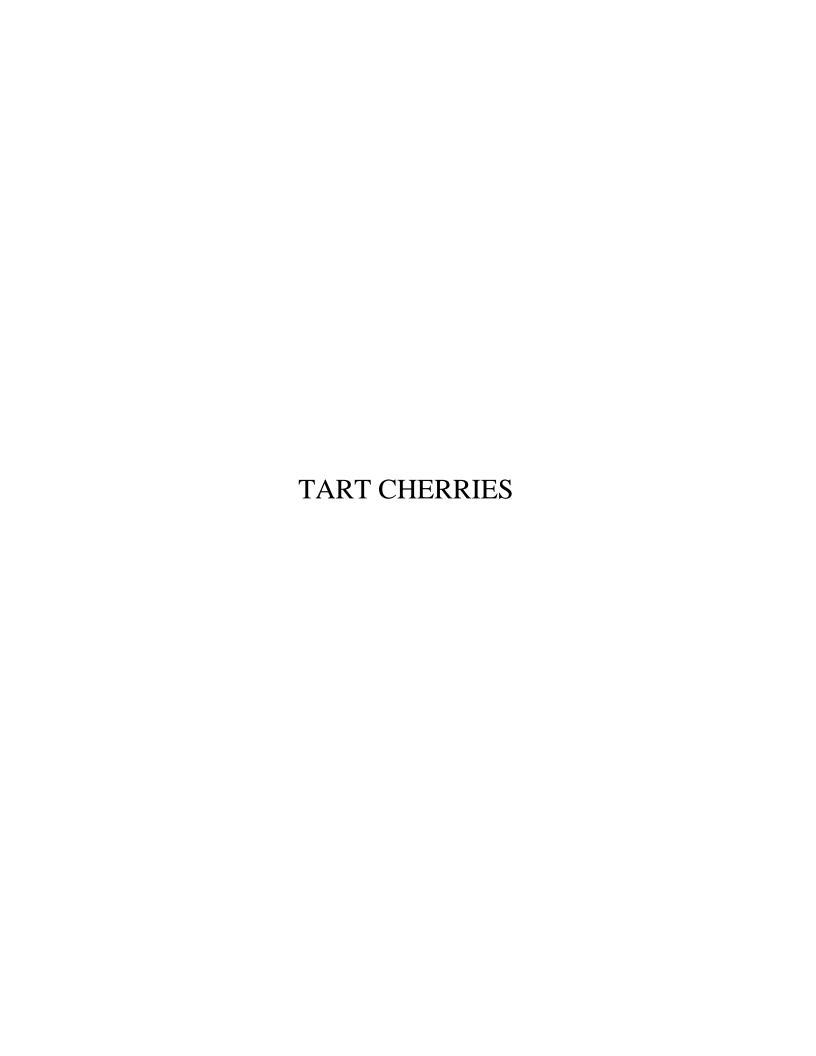
Pear Trees by Variety and County, Colorado 1989

	Number of Trees								
Variety	Delta County	Mesa County	Montrose County	Other Counties	Total State				
Bartlett	26,400	30,600	4,900	1,100	63,000				
Red Bartlett	600	200	900	300	2,000				
D'Anjou	500	700	300		1,500				
Other/Unknown	4,500	5,500	2,900	600	13,500				
TOTAL	32,000	37,000	9,000	2,000	80,000				

Pear Trees per Acre by Year Set and Acres, Colorado, 2002 1/

	1999 - 2001		1981 - 1998		Before 1981		Unknown Age		Total	
Trees Per Acre	Trees	Acres	Trees	Acres	Trees	Acres	Trees	Acres	Trees	Acres
Total	900	6	14,100	76	25,300	218	1,700	20	42,000	320

 $[\]underline{1}$ / Total only shown to avoid disclosure.



TART CHERRIES

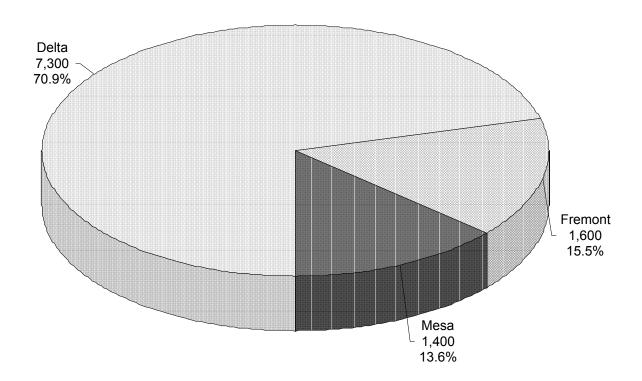
The 10,300 tart cherry trees inventoried in Colorado as of January 1, 2002 declined 74 percent from the 40,000 tart cherry trees in the state in 1994. The first Fruit Tree Census in 1967 showed a total of 81,000 trees in Colorado but the number of trees dropped sharply to 55,000 in the 1979 survey. After a slight increase to 63,000 trees in 1985, the number of tart cherry trees has steadily declined with the sharpest decline occurring between 1994 and January 1, 2002. Nearly 71 percent of all tart cherry trees are in conventional orchards and the remaining 29 percent are in organic orchards.

Delta County had 7,300 tart cherry trees representing 71 percent of the total. Fremont County's 1,600 tart cherry trees accounted for 16 percent and Mesa County, with 1,400 trees, accounted for nearly 14 percent of the total.

Montmorency was by far the leading tart cherry variety with 9,900 trees representing 96 percent of the total.

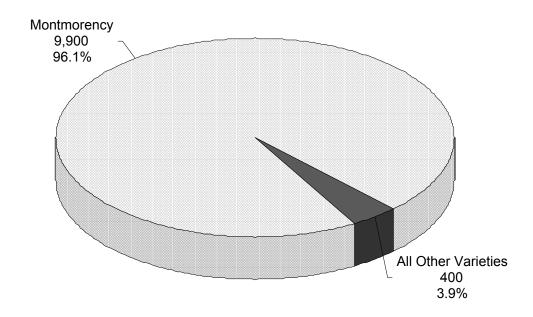
Colorado Fruit Tree/Vineyard Survey Tart Cherry Trees and Percent of Total by County, Colorado, January 1, 2002

Total: 10,300



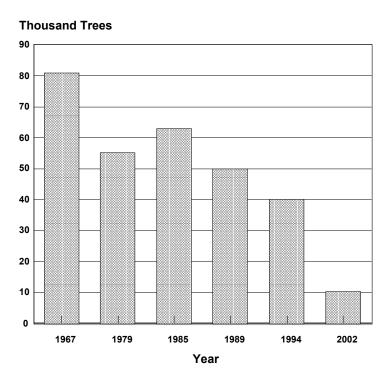
Tart Cherry Trees by Variety, Colorado, January 1, 2002

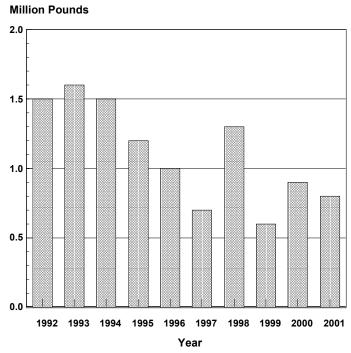
Total: 10,300



Tart Cherry Trees from Previous Surveys Colorado, 1967 - 2002

Colorado Tart Cherry Production 1992 - 2001





Tart Cherry Trees by Age and Variety, Colorado, 2002

Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Trees of all Ages
Montmorency	1,500	700	400	1,300	2,600	1,800	1,600	9,900
Other/Unknown				400				400
TOTAL	1,500	700	400	1,700	2,600	1,800	1,600	10,300

Tart Cherry Trees by Age and Variety, Delta County, Colorado, 2002

		*						
Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Trees of all Ages
Montmorency	1,500	700	400	1,100	200	1,800	1,600	7,300
TOTAL	1,500	700	400	1,100	200	1,800	1,600	7,300

Tart Cherry Trees by Age and Variety, Fremont County, Colorado, 2002

		ices by rig						
Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Trees of all Ages
Montmorency	•••			200	1,000			1,200
Other/Unknown				400				400
TOTAL	•••			600	1,000			1,600

Tart Cherry Trees by Age and Variety, Mesa County, Colorado, 2002

		•						
Variety	2001 1 Year	1999-2000 2 - 3 Years	1996-1998 4 - 6 Years	1991-1995 7 - 11 Years	1981-1990 12 - 21 Years	Before 1981 22 + Years	Unknown Ages	Total Trees of all Ages
Montmorency	•••	•••	•••	•••	1,400	•••		1,400
TOTAL					1,400			1,400

Tart Cherry Trees by Variety and County, Colorado 2002

		Number of Trees									
Variety	Delta County	Fremont County	Mesa County	Other Counties	Total State						
Montmorency	7,300	1,200	1,400		9,900						
Other/Unknown		400			400						
TOTAL	7,300	1,600	1,400		10,300						

Tart Cherry Trees by Variety and County, Colorado 1994

	Ture Cherr	j rrees by ta	ricty una cour	ity, colorado	-// .				
			Number of Trees						
Variety	Delta County	Fremont County	Larimer County	Mesa County	Other Counties	Total State			
Montmorency	24,600	9,600	1,700	2,600	200	38,700			
Other/Unknown	400	700			200	1,300			
TOTAL	25,000	10,300	1,700	2,600	400	40,000			

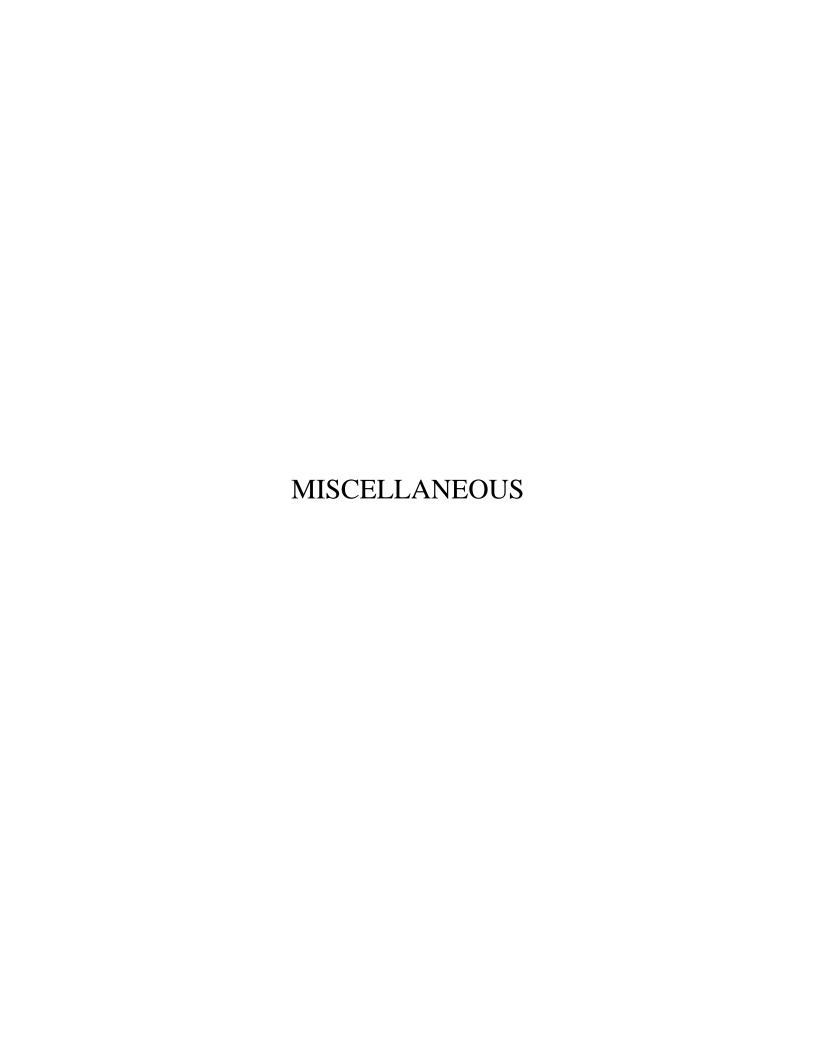
Tart Cherry Trees by Variety and County, Colorado 1989

	Number of Trees								
Variety	Delta County	Fremont County	Larimer County	Mesa County	Other Counties	Total State			
Montmorency	27,700	9,500	4,500	3,200	3,100	48,000			
Other/Unknown	300	500	500	300	400	2,000			
TOTAL	28,000	10,000	5,000	3,500	3,500	50,000			

Tart Cherry Trees per Acre by Year Set and Acres, Colorado, 2002 1/

	1999 - 2001		1981 - 1998		Before 1981		Unknown Age		Total	
Trees Per Acre	Trees	Acres	Trees	Acres	Trees	Acres	Trees	Acres	Trees	Acres
Total	2,200	35	4,700	33	1,800	17	1,600	35	10,300	120

^{1/} Total only shown to avoid disclosure.

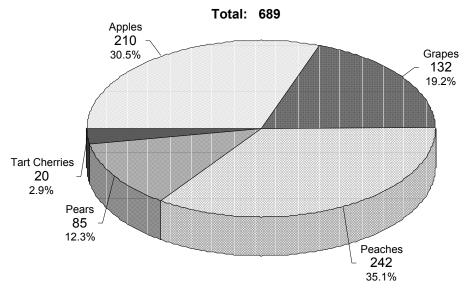


Number of Orchards/Vineyards by Size, Colorado and Selected Counties, 2002 1

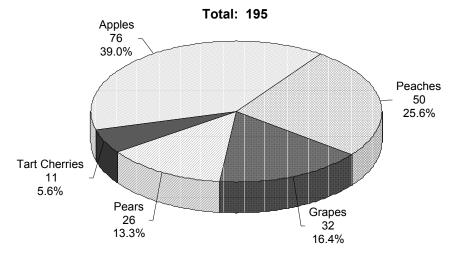
INUII	iner of	Orci	uarus/	vineyard	is by Size	, Colorac	do and Se	lected C	oun <u>t</u> res, 2	2002 1
Area and	App	oles	Gra	pes	Peac	ches	Pea	rs	Tart Ch	nerries
Size of Orchard	Orchards	Trees	Vineyards	Vines	Orchards	Trees	Orchards	Trees	Orchards	Trees
COLORADO							·			
Under 100	66	2,200	20	800	49	1,400	46	1,000	8	100
100 - 499	52	12,300	14	4,600	53	14,800	16	5,000	5	1,600
500 - 999	18	12,000	14	9,400	41	29,400	11	6,900	3	1,800
1,000 - 2,499	35	56,000	33	55,700	52	83,200	8	14,100	3	3,900
2,500 Plus	39	367,500	51	469,500	47	391,200	4	15,000	1	2,900
TOTAL	210	450,000	132	540,000	242	520,000	85	42,000	20	10,300
Delta County										
Under 100	9	300	4	200	9	400	8	200		
100 - 499	11	3,300	3	900	11	2,800	6	2,000		
500 - 999	7	4,500	4	2,900	6	4,500	5	3,500		
1,000 - 2,499	20	34,900	9	14,000	9	15,800	4	6,600		
2,500 Plus	29	303,000	12	79,000	15	83,500	3	9,900		
TOTAL	. 76	346,000	32	97,000	50	107,000	26	22,200	11	7,300
Fremont County										
TOTAL	20	11,000	11	13,000	<u>2</u> /	<u>2</u> /	<u>2</u> /	<u>2</u> /	5	1,600
Larimer County										
TOTAL	<u>2</u> /	<u>2</u> /	4	3,000	<u>2</u> /	<u>2</u> /	<u>2</u> /	<u>2</u> /	•	
Mesa County										
Under 100	16	500	7	300	12	400	9	300		
100 - 499	11	2,700	6	1,800	36	11,000	7	2,100	•••	•••
500 - 999	4	3,000	3	2,400	29	20,600	4	2,500	•••	•••
1,000 - 2,499	8	11,000	17	30,500	38	59,000	4	7,500		
2,500 Plus	3	29,800	30	316,000	30	296,000	D	D		
TOTAL	42	47,000	63	351,000	145	387,000	24	12,400	4	1,400
Montezuma County										
TOTAL	17	8,000	6	48,500	14	10,000	<u>2</u> /	<u>2</u> /		
Montrose County										
TOTAL	12	28,000	4	16,500	9	15,000	5	6,800	•••	
Other Counties										
TOTAL	43	10,000	12	110,000	24	10,000	30	6,000		

Data not published for some counties to avoid disclosure of individual operations
 Included in other counties.
 Data included in a lower size group to avoid disclosure of individual operations. Data not published for some counties to avoid disclosure of individual operations.

Number of Orchards/Vineyards by Type of Fruit, Colorado, January 1, 2002

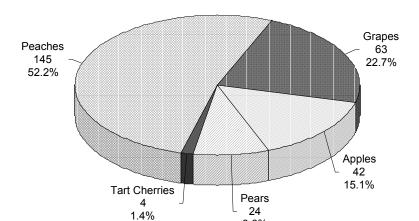


Number of Orchards/Vineyards by Type of Fruit, Delta County, Colorado, January 1, 2002



Number of Orchards/Vineyards by Type of Fruit, Mesa County, Colorado, January 1, 2002

Total: 278



8.6%

Fruit/Vineyard Acres by Category, Colorado, 2002 1

Crop	Conv	entional	Transitional		Organic		Total	
	Acres	% of Total	Acres	% of Total	Acres	% of Total	Acres	% of Total
Apples	1,400	75.7	60	3.2	390	21.1	1,850	100.0
Apricots	52	74.3	3	4.3	15	21.4	70	100.0
Cherries, Sweet	215	79.6	10	3.7	45	16.7	270	100.0
Cherries, Tart	85	70.8			35	29.2	120	100.0
Grapes, All	575	88.5	25	3.8	50	7.7	650	100.0
Grapes, Table	14	93.3			1	6.7	15	100.0
Grapes, Wine	561	88.3	25	3.9	49	7.7	635	100.0
Nectarines	8	53.3	2	13.3	5	33.3	15	100.0
Peaches	1,805	89.6	40	2.0	170	8.4	2,015	100.0
Pears	200	62.5	35	10.9	85	26.6	320	100.0
Plums / Prunes	55	84.6			10	15.4	65	100.0
TOTAL	4,395	81.8	175	3.3	805	15.0	5,375	100.0

^{1/} Percent of total may not add due to rounding.

Fruit/Vineyard Acreage by County, Colorado, January 1, 2002 1/

		Number of Acres							
Fruit	Delta County	Fremont County	Larimer County	Mesa County	Montezuma County	Montrose County	Other Counties	Total State	
Apples	1,295	75	5	160	120	95	100	1,850	
Grapes	115	30	5	415	45	25	15	650	
Peaches	430			1,470	45	55	15	2,015	
Pears	175	•••		95	5	40	5	320	
Tart Cherries .	100	10		10				120	
TOTAL	2,115	115	10	2,150	215	215	135	4,955	

^{1/} Acreage as of January 1, 2002; does not include trees/vines to be planted/topworked or removed in 2002.

Fruit/Vineyard Acreage by County, Colorado, January 1, 1994

	Number of Acres							
Fruit	Delta County	Fremont County	Mesa County	Montezuma County	Montrose County	Other Counties	Total State	
Apples	2,800	190	440	200	190	80	3,900	
Grapes	60	15	240			5	320	
Peaches	395		1,500	15	80	10	2,000	
Pears	260		160		40	5	465	
Tart Cherries	175	50	20			30	275	
TOTAL	3,690	255	2,360	215	310	130	6,960	

^{...} Either zero or less than two acres total.

^{...} Either zero or less than 2 acres total.

Fruit/Vineyard Acreage by County, Colorado, 1989

		Number of Acres							
Fruit	Delta County	Fremont County	Mesa County	Montezuma County	Montrose County	Other Counties	Total State		
Apples	3,450	400	600	375	200	75	5,100		
Grapes	NA	NA	NA	NA	NA	NA	110		
Peaches	450		1,805	30	90	25	2,400		
Pears	245		280	5	60	10	600		
Tart Cherries	175	50	25		20	30	300		
TOTAL	4,320	450	2,710	410	370	140	8,510		

^{...} Either zero or less than two acres total.

Fruit/Vineyard Acreage by County, Colorado, 1985

		Number of Acres							
Fruit	Delta County	Fremont County	Mesa County	Montezuma County	Montrose County	Other Counties	Total State		
Apples	4,513	248	940	418	259	14	6,392		
Grapes	NA	NA	NA	NA	NA	NA	38		
Peaches	505		1,637	9	66		2,217		
Pears	287	2	372	2	37		700		
Tart Cherries	272	48	38		18	165	541		
TOTAL	5,577	298	2,987	429	380	179	9,888		

^{...} Either zero or less than two acres total.

Fruit/Vineyard Acreage by County, Colorado, 1979

		Number of Acres							
Fruit	Delta County	Fremont County	Mesa County	Montezuma County	Montrose County	Other Counties	Total State		
Apples	4,546	NA	708	NA	289	508	6,051		
Grapes	NA	NA	NA	NA	NA	NA	38		
Peaches	551	NA	1,682	NA	50	19	2,302		
Pears	324	NA	424	NA	20	3	771		
Tart Cherries	225	NA	78	NA		164	467		
TOTAL	5,646	NA	2,892	NA	359	694	9,629		

^{...} Either zero or less than two acres total.

Miscellaneous Fruits

Fruit	Orchards	Trees	Acres
	Number	Number	Number
Apricots			
1979	213	11,188	123
1985	119	15,790	143
1989	145	14,000	110
1994	100	11,500	100
2002	75	8,200	70
Nectarines			
1979	25	5,046	29
1985	32	5,210	37
1989	25	7,000	35
1994	20	7,700	40
2002	23	4,200	15
Plums/Prunes			
1979	191	28,626	206
1985	94	20,274	123
1989	120	25,000	120
1994	90	17,000	100
2002	65	12,500	65
Sweet Cherries			
1979	213	28,621	276
1985	153	26,891	312
1989	165	25,000	250
1994	140	27,000	230
2002	100	40,300	270

Fruit Tree/Grape Vines To Be Planted/Topworked and Removed in 2002, Colorado

Fruit	Acres To be Planted/Topworked	Acres to be Removed	Net Change in Acres <u>1</u> /
Apples	50	1	49
Grapes	65	17	48
Peaches	95	43	52
Pears	25	1	24
Tart Cherries	5	24	(19)

^{1/} For apples, the net change in acres may reflect a mixture between the change in the variety of apples produced on the acres and a change in the number of acres.

Usual Bloom and Harvest Dates

Count bloom and trai vest bates								
P	Usual		Usual Harvest Dates					
Fruit	Bloom Dates	Begin	Most Active	End				
Apples	April 20 - May 10	August 5	September 10 - October 10	November 5				
Grapes	June 1 - June 10	August 25	September 1 - September 15	October 10				
Peaches	April 5 - April 25	August 5	August 20 - September 5	September 20				
Pears	April 20 - May 5	August 10	August 15 - September 10	September 20				
Tart Cherries	April 30	July 5	July 20 - July 30	August 5				

ACKNOWLEDGEMENTS

Special recognition is extend to the Colorado fruit and vineyard operators who furnished data for their operations on this survey. Without their cooperation and assistance, this report would not be possible. The assistance and support provided by Colorado State University Cooperative Extension Agents, fruit and grape industry personnel and the Colorado Department of Agriculture was essential for successful completion of the 2002 survey.

The NASDA personnel who did a major portion of the data collection on this survey deserve special recognition for their diligence and expertise in obtaining as much information as possible from producers. The office staff who worked on this survey are also recognized for organizing and conducting this survey above and beyond their regular duties. Special appreciation is given to Eric Stebbins who developed the edit and summary programs under tight time constraints.

